

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) An image processor comprising:
 - a code recognizer which recognizes character codes code from characters in a character region in a character image included in image data to be processed;
 - a size recognizer which recognizes point size of the characters in the character image;
 - a setter which sets a magnification;
 - a magnification changer which enlarges or reduces the image data according to the magnification set by said setter;
 - a memory section which stores a plurality of font data of different point sizes;
 - a selector which selects font data of a particular point size from among the plurality of font data stored in said memory section based on the character codes recognized by said code recognizer, the font point size recognized by said size recognizer, the magnification set by said setter, and a size of a region of the character image in the enlarged or reduced image data;
- wherein the selector first selects font data of a first particular point size based on the character codes recognized by said code recognizer, the font point size recognized by said size recognizer, and the magnification set by said setter, and then determines if a font data of a second particular point size is to be selected

instead of the font data of the first particular point size based on the size of the region of the character image in the enlarged or reduced image data; and

an output section which outputs the font data selected by said selector.

2. (Original) The image processor according to claim 1, further comprising a reading section which reads a document image to provide the image data to be processed.

3. (Original) The image processor according to claim 1, further comprising an image-forming section which forms an image on a recording medium based on the font data outputted by said output section.

4. (Previously Presented) The image processor according to claim 1, further comprising a communication section which communicates with an external apparatus, wherein said selector selects the compatible font data from among a plurality of font data stored in the external apparatus via the communication section.

5. (Original) The image processor according to claim 1, further comprising a size changer which changes the font size selected by said selector, based on the character size recognized by said size recognizer and the magnification set by said setter.

6. (Previously Presented) The image processor according to claim 1, wherein said magnification changer enlarges or reduces the character image based

on the magnification set by said setter when font data in correspondence to the character code recognized by said code recognizer is not stored in said memory section.

7. (Currently Amended) An image processing method comprising ~~the steps~~ of:

recognizing character codes from characters in a character region of a character image included in image data to be processed;

recognizing a point size of the characters in the character image;

setting a magnification;

selecting font data of a particular point size from among a plurality of font data of different point sizes based on the recognized character code, the recognized font point sizes, the set magnification, and a size of a region of the character image in the magnified image data;

wherein font data of a first particular point size is first selected based on the recognized character codes, the font point size recognized by said size recognizer, and the magnification set by said setter, and a determination is then made to determine if font data of a second particular point size is to be selected instead of the font data of the first particular point size based on the size of the region of the character image in the enlarged or reduced image data; and

outputting the selected font data.

8. (Currently Amended) A ~~recordable~~ computer-readable medium containing an image processing program for having a computer execute a process comprising ~~the steps of:~~

recognizing character codes from characters in a character region in a character image included in image data to be processed;

recognizing a point size of the characters in the character code in the character region image;

setting a magnification;

selecting font data of a particular point size from among a plurality of font data of different point sizes based on the recognized character codes, the recognized font point sizes, the set magnification, and a size of a region of the character image in the magnified or un-magnified image data;

wherein font data of a first particular point size is first selected based on the recognized character codes, the font point size recognized by said size recognizer, and the magnification set by said setter, and a determination is then made to determine if font data of a second particular point size is to be selected instead of the font data of the first particular point size based on the size of the region of the character image in the enlarged or reduced image data; and
outputting the selected font data.

9. (Currently Amended) An image processor comprising:

an instruction section which instructs to output image data of N pages to be processed in M sheets of recording medium, wherein N and M are natural numbers and N is not equal to M;

a region recognizer which recognizes character regions and non-character regions of the image data of the N pages, wherein the character regions and non-character regions exist in the image data in a predetermined existing order;

a code recognizer which recognizes character codes from a character image of each character region;

a memory section which stores font data;

a selector which selects font data based on the character code recognized by said code recognizer;

a synthesizer which generates output image data by reconstructing a layout of the non-character image regions and the character regions represented by the font data selected by said selector in the M sheets with keeping the predetermined existing order, and in the reconstructed layout, at least one of a shape of each character region and a start point of a new line of each character region may be changed; and

an output section which outputs the output image data generated by said synthesizer.

10. (Original) The image processor according to claim 9, wherein said memory section stores the plurality of font data of different sizes, further comprising a font size calculator which calculates a size of the font data to be selected by said selector so that the font data selected by said selector are included in a predetermined area in the M sheets.

11. (Original) The image processor according to claim 9, further comprising:

a discriminator which discriminates a character region in the image data to be processed;

a region size calculator which calculates a size of an output character region in the M sheets according to the character region discriminated by said discriminator; and

a font size calculator which calculates a size of the font data to be selected by said selector so that the font data selected by said selector are included in the output character region in the M sheets.

12. (Original) The image processor according to claim 9, wherein N is larger than M.

13. (Original) The image processor according to claim 12, wherein N is an odd number.

14. (Currently Amended) An image processing method comprising ~~the steps~~ of:

instructing to output image data of N pages to be processed in M sheets of recording medium, wherein N and M are natural numbers and N is not equal to M;

recognizing character regions and non-character regions of the image data of the N pages, wherein the character regions and non-character regions exist in the image data in a predetermined existing order;

recognizing character code from a character image of each character region;

selecting font data based on the recognized character codes;

generating output image data in a layout of M sheets by reconstructing a layout of the non-character image regions and the character regions represented by the font data by using the selected font data, and in the reconstructed layout, at least one of a shape of each character region and a start point of a new line of each character region may be changed; and
outputting the generated output image data.

15. (Currently Amended) A ~~recordable~~ computer-readable medium containing an image processing program for having a computer execute a process comprising ~~the steps of~~:

instructing to output image data of N pages to be processed in M sheets of recording medium, wherein N is not equal to M;

recognizing character regions and non-character regions of the image data of N pages, wherein the character regions and non-character regions exist in the image data in a predetermined existing order;

recognizing character codes in a character image of each character region;

selecting font data based on the recognized character codes;

generating output image data by reconstructing a lay-out of non-character image regions and the character regions represented by laying out the selected font data in the M sheets, with keeping the predetermined existing order, and in the reconstructed layout, at least one of a shape of each character region and a start point of a new line of each character region may be changed; and

outputting the generated output image data.

16. (Previously Presented) The image processor of claim 1, wherein the size recognizer recognizes point size of characters by recognizing a font point size of the characters in a line in the character image, calculating the width of the line of the characters based on the width of the recognized font point size, measuring the actual width of the line of characters, comparing the calculated width to the actual width, and correcting the recognized point font size according to the ratio of the calculated width to the actual width.

17. (Previously Presented) The method of claim 7, wherein the size recognizer recognizes point size of characters by recognizing a font point size of the characters in a line in the character image, calculating the width of the line of the characters based on the width of the recognized font point size, measuring the actual width of the line of characters, comparing the calculated width to the actual width, and correcting the recognized point font size according to the ratio of the calculated width to the actual width.

18. (Previously Presented) The recordable medium of claim 8, wherein the recognizing of point size of the characters in the character image is done by recognizing a font point size of the characters in a line in the character image, calculating the width of the line of characters based on the width of recognized font point size, measuring the actual width of the line of characters, comparing the calculated width to the actual width, and correcting the recognized point size according to the ratio of the calculated width to the actual width.

19. (Previously Presented) The image processor of claim 9, wherein the recognizing of point size of the characters in the character image is done by recognizing a font point size of the characters in a line in the character image, calculating the width of the line of characters based on the width of recognized font point size, measuring the actual width of the line of characters, comparing the calculated width to the actual width, and correcting the recognized point size according to the ratio of the calculated width to the actual width.

20. (Previously Presented) The image processing method of claim 14, wherein the recognizing of point size of the characters in the character image is done by recognizing a font point size of the characters in a line in the character image, calculating the width of the line of characters based on the width of recognized font point size, measuring the actual width of the line of characters, comparing the calculated width to the actual width, and correcting the recognized point size according to the ratio of the calculated width to the actual width.

21. (Previously Presented) The recordable medium of claim 15, wherein the recognizing of point size of the characters in the character image is done by recognizing a font point size of the characters in a line in the character image, calculating the width of the line of characters based on the width of recognized font point size, measuring the actual width of the line of characters, comparing the calculated width to the actual width, and correcting the recognized point size according to the ratio of the calculated width to the actual width.

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Canceled)

26. (Canceled)

27. (Canceled)

28. (Currently Amended) An image processor comprising:

an instruction section which instructs to output image data of N pages to be re-arranged in M sheet(s) of recording medium, wherein N and M are natural numbers and N is not equal to M;

a setter which sets at least one magnification based on a sum of all of the areas of images on the N pages, and the instruction from the instruction section;

a synthesizer which generated output image data by laying out the images on the M sheet(s) with the at least one magnification set by the setter.